

Categorical Exclusion Documentation

CX-NM-510-2008-127 Noor 1525-21 Fed Com #2H Parallel Petroleum Corp.

Resources	Not Present on Site	No Impacts	May Be Impacts	Mitigation Included	BLM Reviewer	Date
Watershed			X	X	SWA Spec/Hydrologist /s/ Michael McGee	10/10/08
Water Quality - Surface			X	X		
Water Quality - Ground			X	X	Geologist /s/ John S. Simitz	7/25/08
Cultural	X				Archaeologist /s/ Rebecca Lea Hill 08-R-109A	09/04/08
Rights-of-Way		X			Realty Specialist /s/ Scott Sanderford	9/23/08
Invasive, Non-native Species			X	X	Range Mgmt. Spec. /s/ Joseph M. Navarro	8/27/08
Threatened or Endangered Species	X				Biologist /s/ D Baggao	9/4/08
Special Status Species	X					
Wastes, Hazardous or Solid	X				EPS/NRS /s/ Brian Novosak	8/5/08
Public Health and Safety		X				

**Department of the Interior
Bureau of Land Management
Roswell Field Office
2909 W. Second Street
Roswell, New Mexico 88201**

Project: Noor 1525-21 Fed Com #2H
EA Number: CX NM-510-2008-127
Surface Hole Location: 828' FSL & 175' FEL, Sec. 20 T15S-R25E
Bottom Hole Location: 828' FSL & 660' FEL, Sec. 21, T15S-R25E
Lease Number: NM-112251, NM-112249
Applicant: Parallel Petroleum Corp.
Roswell Field Office: (575) 627-0272

Decision Record

The proposed action is in conformance with the 1997 Roswell Resource Management Plan 1997, as amended, and conforms to the land-use planning terms and conditions required under 43 CFR 1610.5. This action does not conflict with existing county land-use planning or zoning.

Administrative Review and Appeal: Under BLM regulations, this Decision Record (DR) is subject to administrative review in accordance with 43 CFR 3165. Any request for administrative review of this DR must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, 1474 Rodeo Road, Santa Fe, NM 87505, no later than 20 business days after this DR is received or considered to have been received.

Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals, as provided in 43 CFR 3165.4.

/s/ Jerry Dutchover

10/29/2008

For Angel Mayes
Assistant Field Manager – Lands & Minerals

Date

**U.S. Department of the Interior
Bureau of Land Management
Pecos District, Roswell Field Office**

Categorical Exclusion Documentation

**CX NM-510-2008-127
Noor 1525-21 Fed Com #2H
Parallel Petroleum Corp.**

A. Proposed Action

Lease/Serial/Case File No.: NM-112251

Proposed Action Title:

On August 15, 2008, Parallel Petroleum Corporation filed an Application for Permit to Drill (APD) the *Noor 1525-21 Fed Com #2H Gas Well* on federal surface accessing federal subsurface minerals under BLM lease NM-112251. The Notice of Staking (NOS) was received June 12, 2008, with an onsite conducted July 1, 2008, and after review the application was considered complete as submitted.

Location of Proposed Action:

SHL: 828' FSL & 175' FEL, Sec. 20 T15S-R25E
BHL: 828' FSL & 660' FEL, Sec. 21, T15S-R25E
Chaves County, New Mexico NMPM

Description of Proposed Action:

- **ACCESS ROAD:** From US Highway 285 to the well pad is approximately 2.7 miles partly on an unnamed private road and utilizing on-lease roads. There will be 850 feet (0.2 miles) of new on-lease road construction. The existing road has a driving surface (travelway) of at least 14 feet in width with a maximum 30-foot wide surface disturbance area. All other existing access roads used in connection with the drilling of this proposed well would be maintained in a good or better condition than those existing at commencement of operations.
- **WELL PAD:** The construction of each of the proposed well pad is to contain a dual well and will be located in a developed field and spaced between existing gas wells. The pad would be 345 feet long by 288 feet wide (plus 20' X 30'). There will be no reserve pit as the proponent is using a closed-loop drilling system. Standard oilfield construction equipment consisting of; track-type tractors, motor graders, dump trucks, and water trucks would be used to construct the access roads and well pads. A rotary drilling rig would be used to drill the well to a depth of 5500'. Associated production facilities (e.g., pipeline, separator, storage tanks, etc.) would be installed during the production phase on the pad locations. Topsoil would be stockpiled for future use over the disturbed areas.
- Surfacing material (caliche) required for construction of the well pad will be obtained from a BLM approved caliche pit or from a private source.

Applicant (if any):

Parallel Petroleum Corporation
1004 North Big Spring, Suite 400
Midland, Texas 79701

B. Land Use Plan (LUP) Conformance

LUP Name: Roswell Resource Management Plan as Amended Approved: October 1997

The proposed action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decisions:

Minerals Management, Fluid Minerals Goal: *Provide for the leasing, exploration and development of oil and gas resources within the Roswell Resource Area.*

C. Applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

Other document: RFO EA# NM-510-07-93 Date Approved: May 2007

D. Compliance with NEPA

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 11.9,

- The proposed Application for Permit to Drill (APD) is within a developed oil and gas field. A developed field is defined as any field in which a confirmation well has been drilled. There were 12 original Race Horse wells and all of them that have been drilled are producers.
- There is an existing NEPA document (including that supporting a land use plan) that contains a reasonably foreseeable development scenario encompassing this action. The '97 Roswell Resource Management Plan (RMP) contains the reasonable-foreseeable-development projection (RFD). Using the RMP in conjunction with the Environmental Assessment (EA) or EAs for the original 12 Race Horse wells yields enough impacts analyses to cover the new Race Horse wells.
- The NEPA document was finalized or supplemented within five years of spudding the well. The EAs for the original Race Horse wells analyzed site-specific impacts and are less than 2 years old. The new proposals are the same impacts repeated.
- This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment.

As this is an Energy Act CX under Section 390 Categorical Exclusions for Oil and Gas Development under the Energy Policy Act of 2005, a sufficient review is not required to determine if any of the extraordinary circumstances apply (516 DM 2, Appendix 2).

D: Signature

/s/ Jerry Dutchover

10/29/2008

For Angel Mayes
Assistant Field Manager – Lands & Minerals

Date

EXHIBIT A

GENERAL LOCATION MAP

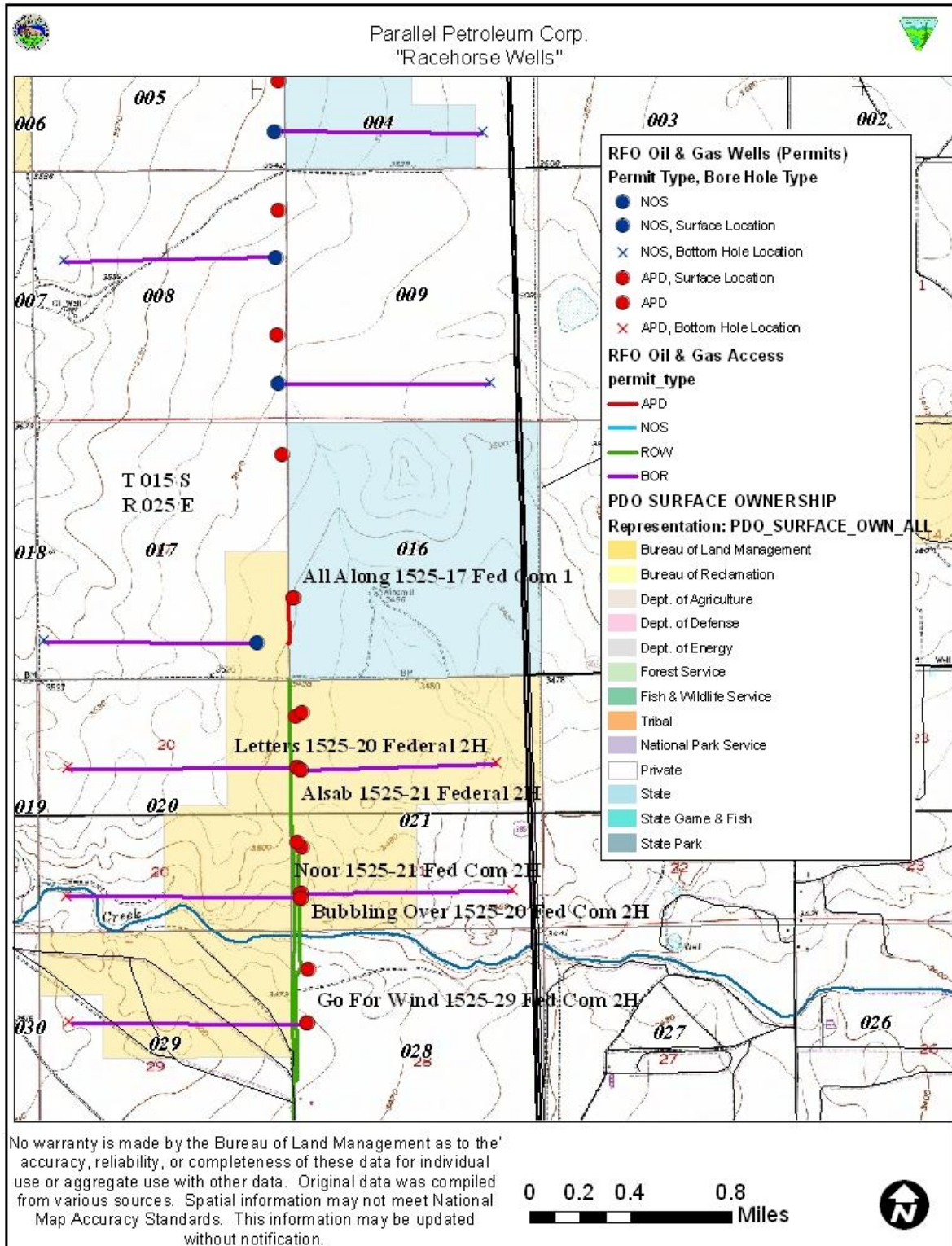


EXHIBIT B

PECOS DISTRICT - RFO CONDITIONS OF APPROVAL

October 29, 2008

Noor 1525-21 Fed Com #2H

SHL: 828' FSL & 175' FEL, Sec. 20 T15S-R25E

BHL: 828' FSL & 660' FEL, Sec. 21, T15S-R25E

Chaves County, New Mexico NMPM

Lease/Serial/Case File No.: NM-112251

Parallel Petroleum Corporation

GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

I. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD (Filing of a Sundry Notice is required for this 60 day extension).

II. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

IV. CONSTRUCTION

A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL:

The topsoil will be stripped to approximately 6 inches in depth within the area designated for construction of the well pad. The operator shall stockpile the stripped topsoil on the side of the well pad. The topsoil will be used for interim and final reclamation of the surface disturbance created by the construction of the well pad.

C. CLOSED SYSTEMS OR STEEL TANKS: No reserve pit will be used.

Steel tanks are required for drilling operations: No Pits Allowed.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT:

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Roswell Field Office at (505) 627-0236.

E. WELL PAD SURFACING:

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational need.

F. ON LEASE ACCESS ROADS:

Road Egress and Ingress

The access road shall be constructed to access the corner of the well pad.

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

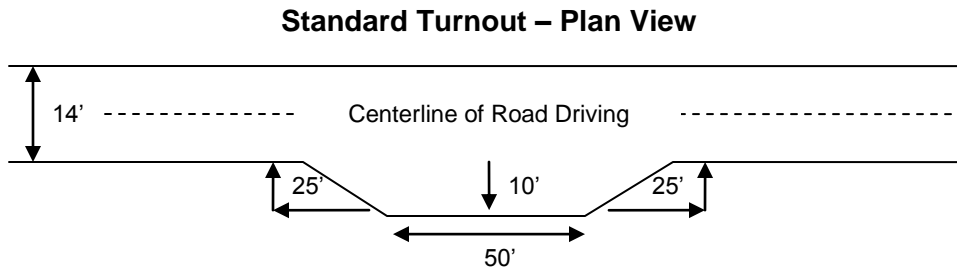
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Turnouts

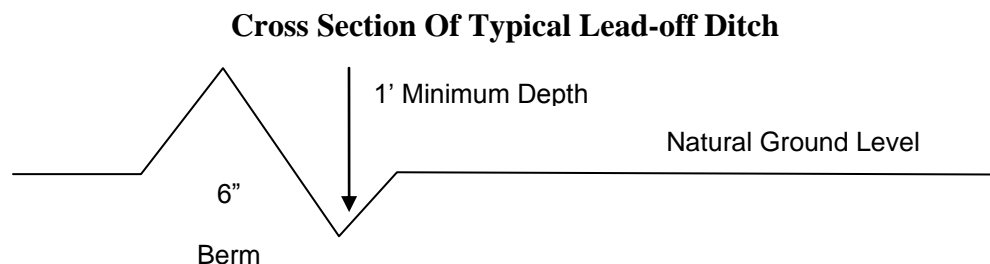
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula For Spacing Interval Of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \underline{400'} + 100' = 200' \text{ lead-off ditch interval}$$

4%

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

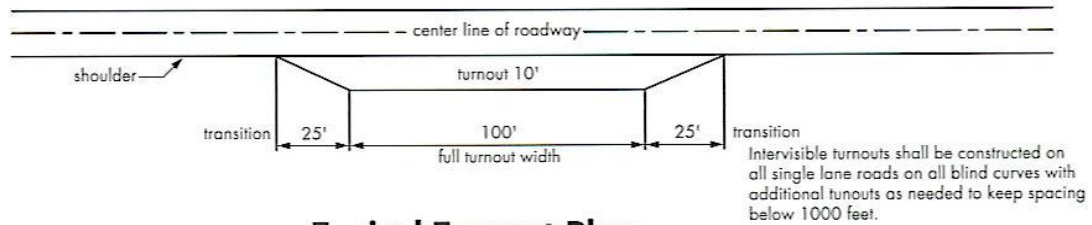
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

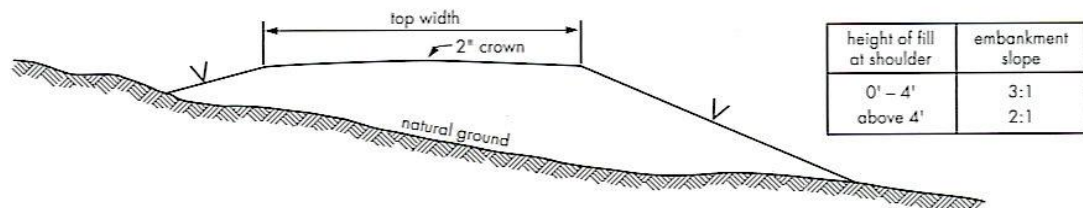
Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

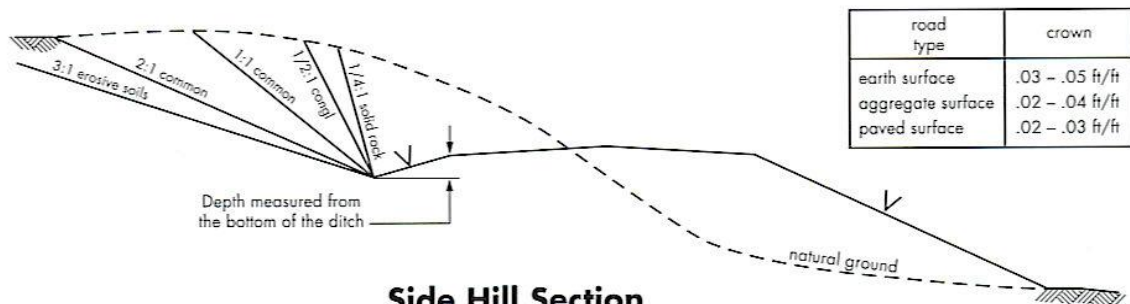
Figure 1 – Cross Sections and Plans For Typical Road Sections



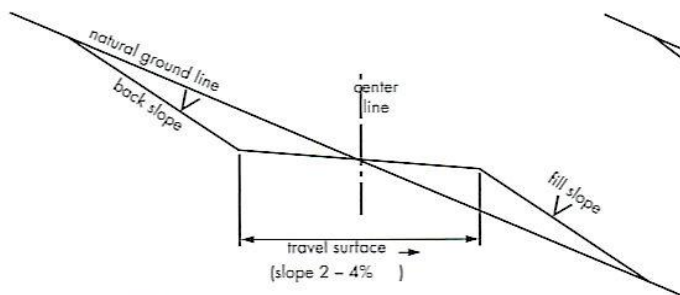
Typical Turnout Plan



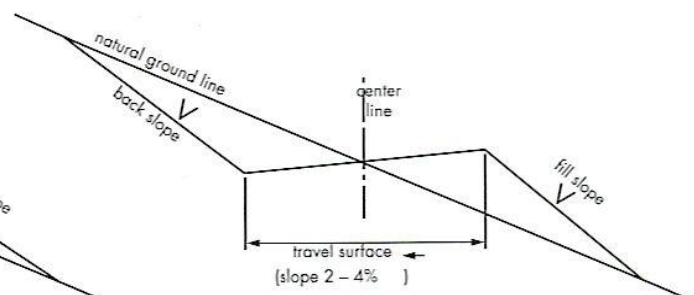
Embankment Section



Side Hill Section



Typical Outsloped Section



Typical Insloped Section

V. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

- 1** Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0205 or after office hours call (575) 910-6024. Engineer on call during office hours call (575) 627-0275 or after office hours call (575) 626-5749.
- 2.** The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:
 - a. Spudding well
 - b. Setting and/or Cementing of all casing strings

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

BOPE Tests

- 3.** Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 4.** Include the API Number assigned to well by NMOCD on the subsequent report of setting the first casing string.
- 5.** The operator will accurately measure the drilling rate in ft/min to set the base of the usable water protection casing string(s) opposite competent rock. The record of the drilling rate along with the caliper-gamma ray-neutron well log run to surface will be submitted to this office as well as all other logs run on the borehole 30 days from completion
- 6.** Air, air-mist or fresh water and non toxic drilling mud shall be used to drill to the base of the usable water protection casing string(s). Any polymers used will be water based and non-toxic.

B. CASING

- 1.** The 8 5/8 inch usable water protection casing string(s) shall be set at approximately 1400 feet in competent bedrock.

If not the operator is required to set usable water protecting casing in the next thick competent bedding (i.e. 15 to 25 ft or greater) encountered and cemented to the surface.

- a. If cement does not circulate to the surface, the Roswell Field Office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin or 500 pounds compression strength, whichever is greater. (This is to include the lead cement).
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
 - d. If cement falls back, remedial action will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 5-1/2 inch production casing is sufficient to tie back 500 feet above the uppermost perforation in the pay zone. If cement does not circulate, a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL:

1. Before drilling below the 8-5/8 inch surface casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.
 2. Before drilling below the 8-5/8 inch surface casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.
 3. The BOPE shall be installed before drilling below the 8-5/8 inch surface casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- a. The BLM Roswell Field office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - b. The tests shall be done by an independent service company.
 - c. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - d. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.

e. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

f. Testing must be done in a safe workman like manner. Hard line connections shall be required.

VI. PRODUCTION

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, Juniper Green (Standard Environmental Color Chart June 2008).

VRM Facility Requirement

Low-profile tanks not greater than eight-feet-high shall be used.

VII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo “interim” reclamation in order to minimize the environmental impacts of development on other resources and uses.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, in order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be

allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

The following seed mix may represent these ecological sites:

Common Name and Preferred Variety	Scientific Name	Pounds of Pure Live Seed Per Acre
Blue grama, var. Lovington	<i>(Bouteloua gracilis)</i>	4.00 lbs.
Sideoats grama, var. Vaughn or El Reno	<i>(Bouteloua curtipendula)</i>	1.00 lb.
Sand dropseed	<i>(Sporobolus cryptandrus)</i>	0.50 lb.
Vine mesquite	<i>(Panicum obtusum)</i>	1.00 lb.
Plains bristlegrass	<i>(Setaria macrostachya)</i>	1.00 lb.
Indian blanketflower	<i>(Gaillardia aristata)</i>	0.50 lb.
Desert or Scarlet Globemallow	<i>(Sphaeralcea ambigua)</i> or <i>(S. coccinea)</i>	1.00 lb.
Annual sunflower	<i>(Helianthus annuus)</i>	0.75 lb.
TOTAL POUNDS PURE LIVE SEED PER ACRE		9.75 lbs.

Certified Weed Free Seed.

If one species is not available increase all others proportionately.

Use no less than 4 species, including 1 forb.

No less than 8.5 pounds lbs per acre shall be applied.

VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

a. Upon abandonment of the well and/or when the access road is no longer in service, a Notice of Intent for Final Abandonment with the proposed surface restoration procedure must be submitted for approval.

b. On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the Private Surface Land Owner agreements and a copy of the release is to be submitted upon abandonment.

c. Upon abandonment of the well, all casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). A 4-inch pipe, 10 feet in length, shall be installed 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: Well name and number, the name of the operator, the lease serial number, the surveyed location (the quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer; such as metes and bounds).

d. Surface Reclamation must be completed within 6 months of well plugging. If the operator proposes to modify the plans for surface reclamation approved on the APD, the operator must attach these modifications to the Subsequent Report of Plug and Abandon using Sundry Notices and Reports on Wells, Form 3160-5.

VIII. PIPELINE PROTECTION REQUIREMENT

Precautionary measures shall be taken by the operator during construction of the access road to protect existing pipelines that the access road will cross over. An earthen berm; 2 feet high by 3 feet wide and 14 feet across the access road travelway (2' X 3' X 14'), shall be constructed over existing pipelines. The operator shall be held responsible for any damage to existing pipelines. If the pipeline is ruptured and/or damaged the operator shall immediately cease construction operations and repair the pipeline. The operator shall be held liable for any unsafe construction operations that threaten human life and/or cause the destruction of equipment.